

Title (en)  
HEMOGLOBIN-CONTAINING LIPOSOMES AND PROCESS FOR PREPARING THE SAME

Publication  
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Application  
**EP 85109515 A 19850729**

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Abstract (en)  
[origin: EP0170247A2] There are provided hemoglobin-containing liposomes encapsulating within liposomes having membranes comprising a lipid material hemoglobin and a methemoglobin formation-inhibiting agent. The liposomes are used as artificial blood with high oxygen-carrying capacity. As the lipid material of the liposomes are used phospholipid materials such as, for example, lecithin, phosphatidylethanolamine, phosphatidic acid, sphingomyelin and hydrogenation products thereof. As the methemoglobin formation-inhibiting agent are used salts of ascorbic acid, glutathion and the like. The liposomes are prepared by dissolving a liposome membrane-forming lipid material and a surface-active agent, removing the solvent from said solution, adding to the residue a hemoglobin solution to which a methemoglobin formation-inhibiting agent has been added and subjecting the starting solution thus obtained to dialysis with a physiological saline solution containing the same methemoglobin formation-inhibiting agent to remove the surface-active agent from the starting solution.

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IPC 8 full level  
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Citation (search report)  
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• [X] CHEMICAL ABSTRACTS, vol. 101, 1984, pages 356-357, no. 36646h, Columbus, Ohio, US; J. SZEBENI et al.: "Oxidative interactions between hemoglobin and membrane lipid. A liposome model", & BIOCHEM. J. 1984, 220 (3), 685-92  
• [YP] BIOCHEMISTRY, vol. 24, no. 12, 4th June 1985, pages 2827-2832, American Chemical Society, US; J. SZEBENI et al.: "Encapsulation of hemoglobin in phospholipid liposomes: characterization and stability"

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